USEPA, IEPA and DuPage County Comments on MNL Groundwater Evaluation Report January 5, 2011

General Comments

- 1. Contaminants from the landfill are impacting up-gradient groundwater monitoring wells at the adjacent Mallard Lake Landfill.
- 2. Natural attenuation of groundwater contamination should only be considered an option if the contamination source has been removed or controlled.
- 3. A groundwater monitoring zone can't be established without conducting corrective action.
- 4. The groundwater contamination caused by the landfill should be (at a minimum) controlled and contained within the District's property boundary.
- 5. The initial ground water characterization shows that the water table mirrors the topography and slopes toward the West Branch DuPage River along each bank. This appears to isolate the Greenbrook School from ground water flow migrating from the landfill. Also, elevated dissolved methane concentrations have been detected along the southeastern margin of the facility. It is recommended that a potentiometric study be conducted in this area during high-water conditions at the river, to determine if ground water from the facility could flow toward the school when an elevated river surface could "flatten" the gradient.
- 6. Since the methane abatement/flare system is a recent addition, then ongoing groundwater monitoring should be required to measure the performance of the system to reduce methane in the groundwater.

Specific Comments

- 1. Include the field data (e.g. dissolved oxygen, pH, redox, conductivity, temperature and turbidity) in all future groundwater evaluation reports.
- 2. For the proposed inorganic groundwater sample parameters listed in table 10 of the report, conduct totals and dissolved analysis for the 3 remaining baseline groundwater monitoring (quarterly) events.
- 3. On page 3, paragraph 2, it is noted that the shallow groundwater flow from the MNL area to the Green Brook Elementary school area converges on a water table low point near the West Branch of the DuPage River. This area needs continuous monitoring to confirm that this is normal state and that this low point is only a season occurrence.
- 4. The location, design and construction of this landfill presents various factors that need to be considered when evaluation the groundwater data. The leachate collection areas throughout the landfill were installed to lower the leachate levels within the landfill to prevent leachate outbreaks that were identified by USEPA and RMT. Landfills designed to meet 258 standards collect leachate

and provide an adequate representation of the constituents generated by the waste. This landfill does not have those design features which makes it difficult to identify all the constituents being generated by the waste at MNL. Therefore, it is difficult to infer that leachate collected at the three extraction locations at MNL provides a solid baseline as to what is actually coming from the landfill.

- 5. Reported in Section 3, several of the agreed upon monitoring locations in the first round of sampling had detectable level of contaminates. Of these detections, many have exceedences above the Class I and II ground water standards. Therefore, at least one more full round of groundwater monitoring is needed to confirm these detections.
- 6. On page 45, paragraph 3, given the results of the first round sampling, it appears that long-term ground water monitoring will be appropriate for MNL. The exact long-term monitoring plan is best determined following the completion of the initial four quarters of sampling.
- 7. On page 46, paragraph 2, it is stated that the long term monitoring plan (after the four rounds of baseline sampling) is to monitor VOC's and SVOC's on a semiannual basis. Given that there is only one round of sampling results available, the baseline sampling should be completed prior to making this assessment.